[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0831; Directorate Identifier 2014-NM-061-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A318, A319, A320, and A321 series airplanes. This proposed AD was prompted by a report of a rupture of a main landing gear (MLG) sliding tube axle. This proposed AD would require an inspection to identify the part number and serial number of the MLG sliding tubes installed on the airplane; and an inspection of the axle on certain MLG sliding tubes for burned areas, and replacement of the sliding tube if necessary. We are proposing this AD to detect and correct cracks in the axle and (partial) detachment of the axle and wheel from the sliding tube, which could result in failure of an MLG.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
 Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC
 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,
 West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE.,
 Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Airbus service information identified in this proposed AD, contact Airbus, Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airwortheas@airbus.com; Internet http://www.airbus.com.

For Messier-Bugatti-Dowty service information identified in this proposed AD, contact Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; phone: 703-450-8233; fax: 703-404-1621; Internet: https://techpubs.services/messier-dowty.com.

You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0831; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2015-0831; Directorate Identifier 2014-NM-061-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014-0058, dated March 11, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Airbus Model A318, A319, A320, and A321 series airplanes. The MCAI states:

A main landing gear (MLG) sliding tube axle rupture occurred in service. Investigation of the affected part showed that this failure was due to an abnormal grinding operation during overhaul by a certain maintenance and repair organisation located in Singapore. A population of MLG sliding tubes was subsequently identified whose axles may have been subject to this grinding operation, which may have resulted in areas of residual stress on the axles on the MLG sliding tubes. In addition, the MSN [manufacturer serial number] of the aeroplanes which are known to have had the affected parts installed have been identified.

This condition, if not detected and corrected, could lead to cracks in the axle and (partial) detachment of axle and wheel from the sliding tube, possibly resulting in failure of a MLG with consequent damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Messier-Bugatti-Dowty, the MLG gear manufacturer, issued Service Bulletin (SB) 200-32-313 and SB 201-32-62 [both dated February 25, 2013], providing inspection instructions and criteria for removal from service of the affected MLG sliding tubes.

For the reasons described above, this [EASA] AD requires a one-time Special Detailed Inspection (SDI) of the axle on the affected MLG sliding tubes and, depending on findings, replacement of the MLG sliding tube.

The SDI includes a detailed visual inspection of the chromium plate for damage, and a Barkhausen noise inspection of the sliding tube axles for burned areas. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0831.

Related Service Information under 1 CFR part 51

Airbus has issued Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014 (for Model A319, A320, and A321 series airplanes). This service bulletin describes procedures for inspection of the MLG sliding tube axles, and replacement if necessary.

Messier-Bugatti-Dowty has issued Service Bulletin 200-32-313, including Appendices A, B, and C, dated February 25, 2013 (for Model A318, A319, and A320 series airplanes); and Service Bulletin 201-32-62, including Appendices A, B, and C, dated February 25, 2013 (for Model A321 series airplanes). These service bulletins describe procedures for inspection of the MLG axles and brake flanges, and replacement if necessary.

The actions described in this service information are intended to correct the unsafe condition identified in the MCAI. This service information is reasonably available; see ADDRESSES for ways to access this service information.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in

the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Explanation of "RC" Procedures and Tests in Service Information

The FAA worked in conjunction with industry, under the Airworthiness Directive Implementation Aviation Rulemaking Committee (ARC), to enhance the AD system. One enhancement was a new process for annotating which procedures and tests in the service information are required for compliance with an AD. Differentiating these procedures and tests from other tasks in the service information is expected to improve an owner's/operator's understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The procedures and tests identified as RC (required for compliance) in any service information have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.

As specified in a NOTE under the Accomplishment Instructions of the specified service information, procedures and tests that are identified as RC in any service information must be done to comply with the proposed AD. However, procedures and tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an alternative method of compliance (AMOC), provided the procedures and tests identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to procedures or tests identified as RC will require approval of an AMOC.

Costs of Compliance

We estimate that this proposed AD affects 3 airplanes of U.S. registry.

We also estimate that it would take about 18 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$4,590, or \$1,530 per product.

In addition, we estimate that any necessary follow-on actions would take about 3 work-hours, for a cost of \$255 per product. We have received no definitive data that would enable us to provide part cost estimates for the on-condition actions specified in this proposed AD. We have no way of determining the number of aircraft that might need these actions.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus: Docket No. FAA-2015-0831; Directorate Identifier 2014-NM-061-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, all manufacturer serial numbers.

- (1) Airbus Model A318-111, -112, -121, and -122 airplanes.
- (2) Airbus Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Airbus Model A320-211, -212, -214, -231, -232, and -233 airplanes.
- (4) Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

(e) Reason

This AD was prompted by a report of a rupture of a main landing gear (MLG) sliding tube axle. We are issuing this AD to detect and correct cracks in the axle and (partial) detachment of the axle and wheel from the sliding tube, which could result in failure of an MLG.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) MLG Sliding Tube Part Number and Serial Number Identification

Within 3 months after the effective date of this AD: Do an inspection to identify the part number and serial number of the MLG sliding tubes installed on the airplane. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of the MLG sliding tubes can be conclusively determined from that review.

(h) Identification of Airplanes Not Affected by the Requirements of Paragraph (i) of this AD

An airplane with a manufacturer serial number (MSN) not listed in figure 1 to paragraph (h) of this AD is not affected by the requirements of paragraph (i) of this AD, provided it can be determined that no MLG sliding tube having a part number and serial number listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD has been installed on that airplane since first flight of the airplane.

Figure 1 to Paragraph (h) of this AD

Affected Airplanes Listed by MSN						
0179	0214	0296	0412	0558	0604	
0607	0668	0704	0720	0726	0731	
0754	0771	0799	0828	0841	0855	
0909	0914	0925	0939	0986	1028	
1030	1041	1070	1083	1093	1098	
1108	1148	1294	1356	2713	2831	

 $\label{eq:continuous} \begin{array}{ll} Table~1~to~Paragraphs~(h),~(i),~(k)(1),~(k)(2),~(l)(1),~and~(l)(2)~of~this~AD-\\ &Affected~MLG~Sliding~Tubes \end{array}$

Part Number	Serial Number
201160302	78B
201160302	1016B11
201160302	1144B
201371302	B4493
201371302	B4513
201371302	SS4359
201371302	B4530
201371302	B4517
201371302	B4568
201371302	B4498
201371302	4490B
201371302	B202-4598
201371302	B165-4623
201371302	B244-4766
201371302	B267-4794
201371302	B272-4813
201160302	1108B

Part Number	Serial Number	
201371304	B041-4871	
201371304	B045-4869	
201371304	B001-4781	
201371304	B051-4892	
201371304	B110-1952	
201371304	B054-4891	
201371304	B063-4921	
201371304	B071-4911	
201371304	B071-4917	
201371304	B080-1933	
201371304	B117-5010	
201371304	B120-4989	
201371304	B132-2023	
201371304	B114-1956	
201371304	B208-2009	
201371304	B133-1947	
201371304	B154-5037	
201371304	B89 4952	
201371304	B129-1964	
201371304	B227-2010	
201371304	B170-5031	
201371304	B182-5047	
201371304	B239-2053	
201371304	B1401-2856	
201371304	B1813-3142	
201371304	B116-5004	
201522353	B011-149	
201522350	B014-25	
201522350	B019-56	

Part Number	Serial Number
201522350	B019-57
201522350	B021-69
201522350	B022-60
201522353	B03-111
201522353	B03-110
201522353	B112-317
201522353	B174-351
201522353	B179-392
201383350	4377B
201383350	4393B
201383350	B1831
201383350	B1832
201383350	SS4355B
201383350	SS4400B

(i) Inspections

For each MLG sliding tube, identified as required by paragraph (g) of this AD, having a part number and serial number listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD: Within 3 months after the effective date of this AD, inspect each affected MLG axle and brake flange by doing a detailed visual inspection of the chromium plate for damage, and a Barkhausen noise inspection of the sliding tube axles for burned areas, in accordance with the Accomplishment Instructions of Messier-Bugatti-Dowty Service Bulletin 200-32-313, including Appendices A, B, and C, dated February 25, 2013 (for Model A318, A319, and A320 series airplanes); or Messier-Bugatti-Dowty Service Bulletin 201-32-62, including Appendices A, B, and C,

dated February 25, 2013 (for Model A321 series airplanes); or Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014 (for Model A319, A320, and A321 series airplanes).

(j) Corrective Action

If, during any inspection required by paragraph (i) of this AD, any damage is detected: Before further flight, replace the MLG sliding tube with a serviceable tube, in accordance with the Accomplishment Instructions of Messier-Bugatti-Dowty Service Bulletin 200-32-313, including Appendices A, B, and C, dated February 25, 2013 (for Model A318, A319, and A320 series airplanes); or Messier-Bugatti-Dowty Service Bulletin 201-32-62, including Appendices A, B, and C, dated February 25, 2013 (for Model A321 series airplanes); or Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014 (for Model A319, A320, and A321 series airplanes).

(k) Definition of Serviceable Sliding Tube

For the purpose of this AD, a serviceable sliding tube is defined in paragraphs (k)(1) and (k)(2) of this AD.

- (1) A sliding tube having a part number and serial number not listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD.
- (2) A sliding tube having a part number and serial number listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD that has passed the inspections required by paragraph (i) of this AD.

(1) Parts Installation Prohibitions

- (1) For airplanes that have an MLG sliding tube installed that has a part number and serial number listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD: After an airplane is returned to service following accomplishment of the actions required by paragraphs (g), (h), and (i) of this AD, no person may install on any airplane an MLG sliding tube having a part number and serial number listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD.
- (2) For airplanes that, as of the effective date of this AD, do not have an MLG sliding tube installed that has a part number and serial number listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD: No person may install on any airplane an MLG sliding tube having a part number and serial number listed in table 1 to paragraphs (h), (i), (k)(1), (k)(2), (l)(1), and (l)(2) of this AD.

(m) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. Information may

be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

- (2) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.
- (3) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(n) Special Flight Permits

Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the

airplane to a location where the airplane can be modified (if the operator elects to do so), provided the MLG remains extended throughout the flight.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) Airworthiness Directive 2014-0058, dated March 11, 2014, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0831.

(2) For Airbus service information identified in this AD, contact Airbus,

Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex,

France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-

eas@airbus.com; Internet http://www.airbus.com.

(3) For Messier-Bugatti-Dowty service information identified in this AD, contact

Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA

20166 8910; phone: 703-450-8233; fax: 703-404-1621; Internet:

https://techpubs.services/messier-dowty.com.

(4) You may view this service information at the FAA, Transport Airplane

Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of

this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on April 9, 2015.

Jeffrey E. Duven,

Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

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